

Application Serial No. 10/010,293

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Listing of the Claims:

1. (Currently Amended) A fluid quick connector comprising:
an electrically conductive connector housing ~~an endform~~ having a bore
extending from one end; and

an endform having a bore extending from an open end, the open end of
the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and
contacting the endform to electrically connect the endform and the quick connector
housing, the contact member including:

a first portion mounted in the quick connector housing bore in
contact with the quick connector housing; and

~~means;~~ an arm extending from the first portion for passage and
passing through an the open end of a the bore in the endform into contact with
an inner surface of the mate endform.

Claims 2 and 3. (Cancelled)

4. (Currently Amended) The fluid quick connector of claim 1
further comprising:

~~the means is an arm~~ having a bent end extending into the mate open
end of the endform.

5. (Currently Amended) ~~The A~~ fluid quick connector ~~of claim 4~~
~~wherein the arm and the bent end comprise~~ comprising:

an electrically conductive connector housing configured to mate with
an endform having a bore extending from one end;

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an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a first portion mounted in the quick connector housing bore in contact with the quick connector housing; and

an arm extending from the first portion and having a bent end extending through the open end of the bore in the endform into contact with an inner surface of the endform, the arm and the bent end including:

a beam portion extending from the first portion of the contact member;

a back taper surface extending angularly from the beam portion;
and

a tip end extending angularly from an edge at one end of the back taper surface and defining a lead-in surface engaged by a tip end of the endform.

6. (Original) The fluid quick connector of claim 5 wherein:
the back taper surface extends at an obtuse included angle with respect to the beam; and
the tip end extends at an obtuse included angle from the back taper surface.

7. (Currently Amended) The fluid quick connector of claim 1 wherein the first portion comprises:
a tubular body mounted in the bore in the quick connector housing, the means arm extending from one end of the tubular body.

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8. (Currently Amended) ~~The~~ A fluid quick connector ~~of claim 7~~
wherein comprising:

an electrically conductive connector housing configured to mate with
an endform having a bore extending from one end; and

an electrically conductive contact member mounted in the housing and
contacting the endform to electrically connect the endform and the quick connector
housing, the contact member including:

a tubular body mounted in the bore in the quick connector in
contact with the quick connector housing, the tubular body is being
longitudinally split to form spaced edges allowing compression of the tubular
body for press-fit mounting of the tubular body in the bore in the quick
connector housing[.]; and

means, extending from one end of the tubular body for passage
through the open end of the bore in the endform into contact with an inner
surface of the endform.

9. (Currently Amended) ~~The~~ A fluid quick connector ~~of claim 7~~
wherein ~~the tubular body further comprises~~ comprising:

an electrically conductive connector housing configured to mate with
an endform having a bore extending from one end; and

an electrically conductive contact member mounted in the housing and
contacting the endform to electrically connect the endform and the quick connector
housing, the contact member including:

a tubular body mounted in the bore in the quick connector in
contact with the quick connector housing, a second another end oppositely
formed from the one a first end of the body, a lead-in edge formed on the
another second end[.] ; and

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means, extending from the first end of the tubular body for passage through the open end of the bore in the endform into contact with an inner surface of the endform.

10. (Currently Amended) The fluid quick connector of claim 1 wherein the first portion of the contact member comprises:

an annular ring mounted in the bore in the quick connector housing, the arm means for passage extending from the annular ring.

11. (Currently Amended) The fluid quick connector of claim 10 further comprising:

the means is being an arm having a bent end extending through an the open end of ~~a~~ the bore in the male endform.

12. (Currently Amended) ~~The~~ A fluid quick connector of claim 10 further comprising:

an electrically conductive connector housing configured to mate with an endform having a bore extending from one end; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

an annular ring mounted in the quick connector housing bore in contact with the quick connector housing;

means, extending from the annular ring, for passage through the open end of the bore in the endform into contact with an inner surface of the endform; and

at least one locating member extending angularly from the annular ring of the contact member, the at least one locating member

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engagable with ~~an~~ the end of the male endform to center the annular ring relative to the male endform.

13. (Currently Amended) The fluid quick connector of claim 10 wherein:

the annular ring is mountable in registry with a shoulder between two stepped bore portions of the ~~through~~ bore in the quick connector housing.

Claim 14. (Cancelled)

15. (Currently Amended) A fluid quick connector comprising:
a an electrically conductive connector housing having a bore extending from one end;

an electrically conductive endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and
~~the quick connector housing and the endform formed of an electrically conductive material; and~~

an electrical contact member having a first portion fixedly mounted in a bore in the housing in contact with the housing, and means an arm extending from the first portion through ~~an~~ the open end of a the bore in the endform to dispose the arm in contact with into an inner surface of the endform to electrically connect the endform and the housing.

Claims 16-29. (Cancelled)

30. (Currently Amended) The fluid quick connector of claim 15 further comprising:

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the means is being an arm having a bent end extending into the male endform.

31. (Currently Amended) The A fluid quick connector of claim 30 wherein ~~the arm and the bent end comprise~~ comprising:

an electrically conductive connector housing having a bore extending from one end;

an electrically conductive endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a first portion mounted in the quick connector housing bore in contact with the quick connector housing; and

an arm extending from the first portion and having a bent end extending through the open end of the bore in the endform into contact with an inner surface of the endform, the arm and the bent end including:

a beam portion extending from the first portion of the contact member;

a back taper surface extending angularly from the beam portion; and

a tip end extending angularly from an edge at one end of the back taper surface and defining a lead-in surface engaged by a tip end of the endform.

32. (Previously Presented) The fluid quick connector of claim 31 wherein:

the back taper surface extends at an obtuse included angle with respect to the beam; and

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the tip end extends at an obtuse included angle from the back taper surface.

33 (Previously Presented) The fluid quick connector of claim 15 wherein the first portion comprises:

a tubular body mounted in the bore in the quick connector housing, the means extending from one end of the tubular body.

34. (Currently Amended) ~~The A~~ fluid quick connector ~~of claim 33~~ wherein comprising:

an electrically conductive connector housing having a bore extending from one end:

an endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a tubular body mounted in the bore in the quick connector in contact with the quick connector housing, the tubular body is being longitudinally split to form spaced edges allowing compression of the tubular body for press-fit mounting of the tubular body in the bore in the quick connector housing[.]; and

means, extending from one end of the tubular body for passage through the open end of the bore in the endform into contact with an inner surface of the endform.

35. (Currently Amended) ~~The A~~ fluid quick connector ~~of claim 33~~ wherein the tubular body further comprises comprising:

an electrically conductive connector housing having a bore extending from one end:

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an endform having a bore extending from an open end, the open end of
te endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and
contacting the endform to electrically connect the endform and the quick connector
housing, the contact member including:

a tubular body mounted in the bore in the quick connector in
contact with the quick connector housing, a second another end oppositely
formed from the one a first end of the body, a lead-in edge formed on the
another second end[.]; and

means, extending from the first end of the tubular body for
passage through the open end of the bore in the endform into contact with an
inner surface of the endform.

36. (Previously Presented) The fluid quick connector of claim 15
wherein the first portion of the contact member comprises:

an annular ring mounted in the bore in the quick connector housing, the
arm extending from the annular ring.

37. (Currently Amended) The fluid quick connector of claim 36
further comprising:

the means is being an arm having a bent end extending through an open
end of a bore in the male endform.

38. (Currently Amended) The A fluid quick connector ~~of claim 36~~
further comprising:

an electrically conductive connector housing having a bore extending
from one end;

an endform having a bore extending from an open end, the open end of
te endform inserted into the bore in the housing; and

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an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

an annular ring mounted in the quick connector housing bore in contact with the quick connector housing;

means, extending from the annular ring, for passage through the open end of the bore in the endform into contact with an inner surface of the endform; and

at least one locating member extending angularly from the annular ring of the contact member, the at least one locating member engagable with an the end of the male endform to center the annular ring relative to the male endform.